

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): In a device for solid phase micro-extraction having a needle, the improvement comprising:

a porous sheath adapted to pierce a septum,

said porous sheath having active extraction media contained therein to protect the active extraction media from exposure outside the sheath and possible damage thereby, and having perforations along at least a section of length thereof which enable the active extraction media to carry out a solid phase micro-extraction process from within the sheath,

wherein said porous sheath comprises a tube movably mounted in said needle so as to be extendable therefrom and allow access to said active extraction media through said perforations, and retractable thereinto to cover said perforations with the needle.

Claims 2 and 3 (canceled)

Claim 4 (currently amended): The improvement of Claim 2 1,

wherein said perforations are located along substantially an entire length of said tube.

Claim 5 (currently amended): The improvement of Claim 2 1,

wherein said tube includes an end section selected from the group consisting of a closed end section and an open end section.

Claim 6 (original): The improvement of Claim 5,

wherein said tube includes an end section selected from the group consisting of a flat end section and a pointed end section.

Claim 7 (currently amended): The improvement of Claim 2 1, wherein said tube includes an end section selected from the group consisting of a flat end section and a pointed end section.

Claim 8 (original): The improvement of Claim 1,

wherein said perforations have a configuration, selected from the group consisting of circular and elongated.

Claim 9 (currently amended): The improvement of Claim 2 1,

wherein said tube includes a section configured to form a seal when said tube is inserted through a septum.

Claim 10 (currently amended): A porous protective sheath for use with a solid phase micro-extraction apparatus having a needle, comprising:

a porous tube adapted to pierce a septum;

said porous tube having an end section selected from the group consisting of a closed section and an open end section,

said porous tube being provided with at least a section along a length thereof having perforations,

said porous tube having an active extraction media contained therein to protect the active extraction media from exposure outside the sheath and possible damage thereby,

and wherein the perforations enable the active extraction media to carry out solid phase micro-extraction from within the porous tube,

and said porous tube adapted to be movably mounted in said needle so as to be extendable therefrom and allow access to said active extraction media through said perforations, and retractable thereinto to cover said perforations with the needle.

Claim 11 (original): The sheath of Claim 10,

wherein said perforations are located along a substantial length of said tube.

Claim 12 (original): The sheath of Claim 10,

wherein said end section has a configuration selected from the group consisting of flat and pointed end sections.

Claim 13 (original): The sheath of Claim 10,

wherein said perforations have a configuration selected from the groups consisting of circular and non-circular.

Claim 14 (original): The sheath of Claim 10,

wherein said tube is constructed from materials selected from the group consisting of metals and metal alloys.

Claim 15 (original): The sheath of Claim 10,

where said tube additionally includes a section configured to form a seal with an object through which said tube extends.

Claim 16 (canceled)

Claim 17 (previously presented): The sheath of Claim 10,

wherein said tube is constructed of material having a strength sufficient to carry out a septum piercing operation without damage to said tube.

Claim 18 (previously presented): The sheath of Claim 10,

wherein said active extraction media has a loose particulate composition and said perforations are sized smaller than the active extraction media to keep the active extraction media entrapped within the sheath.

Claim 19 (previously presented): The sheath of Claim 10,

wherein said active extraction media is cold-pressed onto and within the sheath.

Claim 20 (previously presented): The sheath of Claim 1,

wherein said active extraction media has a loose particulate composition and said perforations are sized smaller than the active extraction media to keep the active extraction media entrapped within the sheath.

Claim 21 (previously presented): The sheath of Claim 1,

wherein said active extraction media is cold-pressed onto and within the sheath.

Claim 22 (new): A porous protective sheath for solid phase micro-extraction, comprising:

a porous tube adapted to pierce a septum,

said porous tube having an end section selected from the group consisting of a closed section and an open end section,

said porous tube being provided with at least a section along a length thereof having perforations,

said porous tube having an active extraction media contained therein to protect the active extraction media from exposure outside the sheath and possible damage thereby, and wherein the perforations enable the active extraction media to carry out solid phase micro-extraction from within the porous tube, and

wherein said active extraction media has a loose particulate composition and said perforations are sized smaller than the active extraction media to keep the active extraction media entrapped within the sheath.

Claim 23 (new): The sheath of Claim 22,

wherein said perforations are located along a substantial length of said tube.

Claim 24 (new): The sheath of Claim 22,

wherein said end section has a configuration selected from the group consisting of flat and pointed end sections.

Claim 25 (new): The sheath of Claim 22,

wherein said perforations have a configuration selected from the groups consisting of circular and non-circular.

Claim 26 (new): The sheath of Claim 22,

wherein said tube is constructed from materials selected from the group consisting of metals and metal alloys.

Claim 27 (new): The sheath of Claim 22,

where said tube additionally includes a section configured to form a seal with an object through which said tube extends.

Claim 28 (new): The sheath of Claim 22,

wherein said tube is constructed of material having a strength sufficient to carry out a septum piercing operation without damage to said tube.

Claim 29 (new): In a device for solid phase micro-extraction, the improvement comprising:

a porous sheath adapted to pierce a septum,

said porous sheath having active extraction media contained therein to protect the active extraction media from exposure outside the sheath and possible damage thereby, and having perforations along at least a section of length thereof which enable the active extraction media to carry out a solid phase micro-extraction process from within the sheath,

wherein said active extraction media has a loose particulate composition and said perforations are sized smaller than the active extraction media to keep the active extraction media entrapped within the sheath.

Claim 30 (new): The improvement of Claim 29,

wherein said perforations are located along substantially an entire length of said tube.

Claim 31 (new): The improvement of Claim 29,

wherein said tube includes an end section selected from the group consisting of a closed end section and an open end section.

Claim 32 (new): The improvement of Claim 31,

wherein said tube includes an end section selected from the group consisting of a flat end section and a pointed end section.

Claim 33 (new): The improvement of Claim 29, wherein said tube includes an end section selected from the group consisting of a flat end section and a pointed end section.

Claim 34 (new): The improvement of Claim 29,
wherein said perforations have a configuration, selected from the group consisting of circular and elongated.

Claim 35 (new): The improvement of Claim 29,
wherein said tube includes a section configured to form a seal when said tube is inserted through a septum.